

RUST, SPHENOSPORA KEVORKIANII LINDER, ON
EPIDENDRUM TAMPENSE ORCHIDS IN FLORIDA

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Epidendrum tampense Ldl., one of our native Florida orchids, is commonly attacked by the rust fungus, *Sphenospora kevorkianii* Linder. The following orchids also are reported as hosts: *Batemanian* sp., *Bletia purpurea*, *Doritaenopsis* Rosy Shower, *Doritis pulcherrima*, *Epidendrum alatum*, *E. Bahamiensis*, *E. corymbosum*, *E. dichromum*, *E. difforme*, *E. gracile*, *E. mirianthum*, *E. nocturnum*, *E. oncidioides*, *E. plicatum*, *E. radicans*, *E. rigidum*, *Huntleya bartii*, *Ionopsis utricularioides*, *Lockhartia* sp., *Ornithocephalus gladiatus*, *Phalaenopsis Rothomago* X *Doritis pulcherrima*, *Polystachya minor*, *Rodriguezia secunda*, *Spathiger rigidus*, and *Stanhopea graveolens* (1). Recently, plants of *Epicattleya Acutiepie* and *Cattleya Louise Georgianna* X *Epidendrum tampense* were found infected with this rust. This poses quite a problem for orchid growers because of the large number of *Epicattleya* orchids that have *Epidendrum tampense* or other susceptible *Epidendrums* as one of the parents.



Fig. 1. Rust, *Sphenospora kevorkianii* Linder, on **under** side of leaves of *Epidendrum tampense* Ldl.

SYMPTOMS. On *Epidendrum tampense*, the first symptoms are small, raised, orange areas or pustules on the under surface of the ruptured leaf. As the lesions enlarge, the older pustules turn black as more orange pustules, containing newly produced spores, are formed. Occasionally, these pustules develop a concentric pattern that gives the infected area the appearance of a target spot. On older infections, the upper leaf surface shows orange and black ruptured areas also with this target spot effect. Only the leaves are attacked by the fungus (Fig. 1).

CONTROL. Infected leaves should be removed and destroyed by burning. Plantvax 75 WP, when applied as a spray twice at 30-day intervals at the rate of 2 ½ tablespoons per gallon of water, has recently shown promise as an eradicator of the rust. Ferbam 76 WP and captan 50 WP, used at the rates of 1 to 1 ½ table-spoons per gallon of water, will give protection from infection by this fungus (1).

Literature Cited

1. Burnett, H. C. 1965. Orchid diseases. Fla. Dept. Agr. & Consumer Serv., Div. of Plant Ind. Bull. 1(3):1-57.